



# LIFE SPAN, HEALTH SPAN & WELLNESS

## Norse Foundation

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# THIS WAS ME!

- International athlete.
- PE teacher
- Sports therapist
- Gym owner.
- Healthy – or so I thought!!!



# THEN THIS HAPPENED!

- Hereditary high blood pressure.
- Hypothyroidism
- Psoriasis
- Iritis

## Hypothyroidism



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# FAT DAN – THIN DAN





# WHAT'S IT ALL ABOUT??

We live in a world where **modern medicine has prolonged life or delayed death.**

However, we have all noticed the **rise in horrible disease where our elderly people die from horrible degenerative diseases.**

Often the last 2, 5, or 10 years of their life are spent in pain or misery.

In the western world we have **health care systems that are reactive and can no longer cope with the demand.**

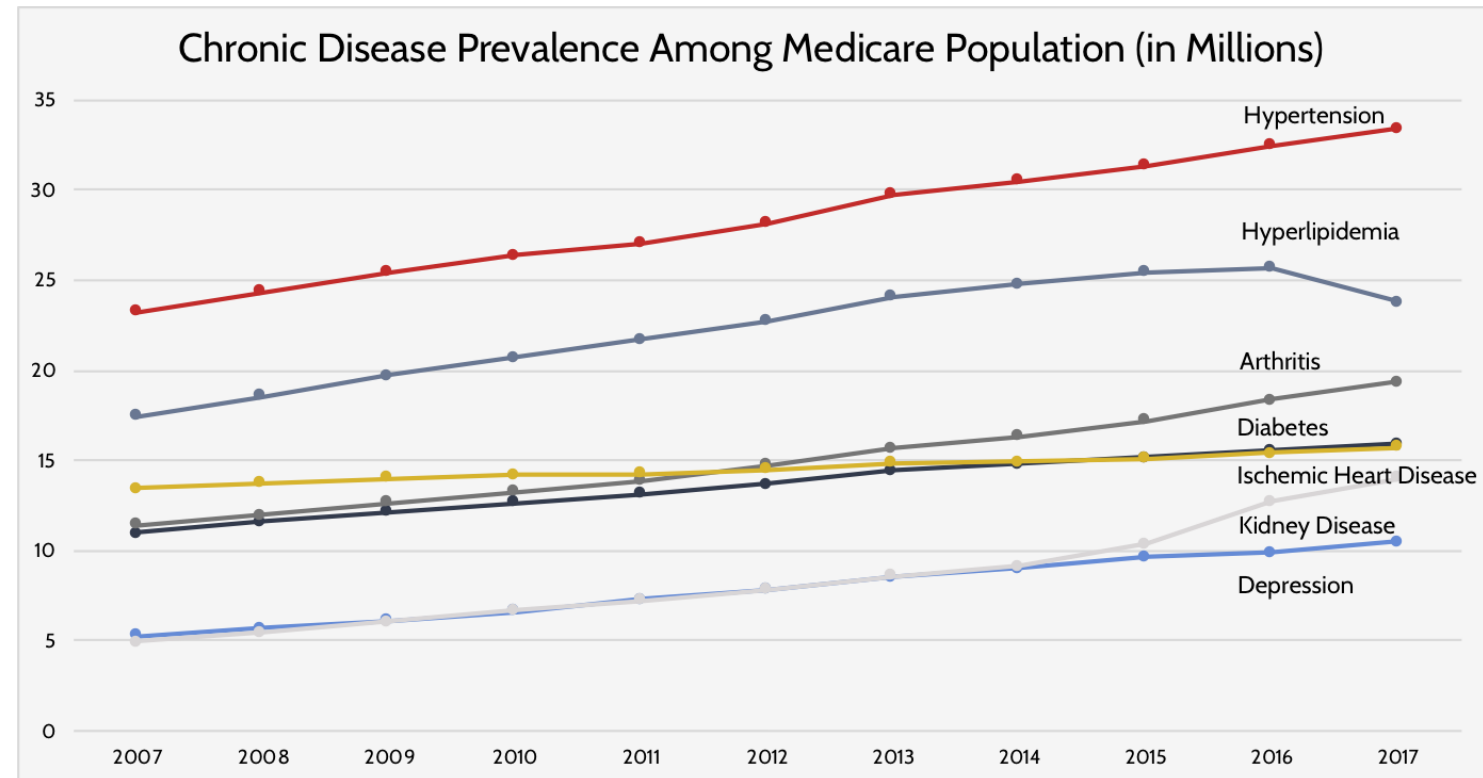




# THE RISE IN DISEASES

The rise in the following disease is alarming.

- Heart disease
- Diabetes
- Alzheimer's
- Dementia
- Obesity
- Kidney Disease
- Depression
- Stroke





# WHAT IF THERE WAS ANOTHER WAY

Many experts are saying that our **modern western lifestyle is promoting these problems.**

Our inbuilt desire for sweet foods, fatty foods, etc is causing the problem.

However, **if we change our lifestyles and diet, we can reverse these problems and trends.**





# WHAT DO WE ALL WANT?

We all must accept **that we will get older and that eventually we will die.**

This period is termed as our **LIFESPAN!**

Normally, we die from some kind of pathology. There are a few people who simply die of old age.

**The period of our lives that we experience with good health is referred to as our HEALTH SPAN.**

Obviously, we want the difference between these two periods to be as small as possible and hopefully prolong both.

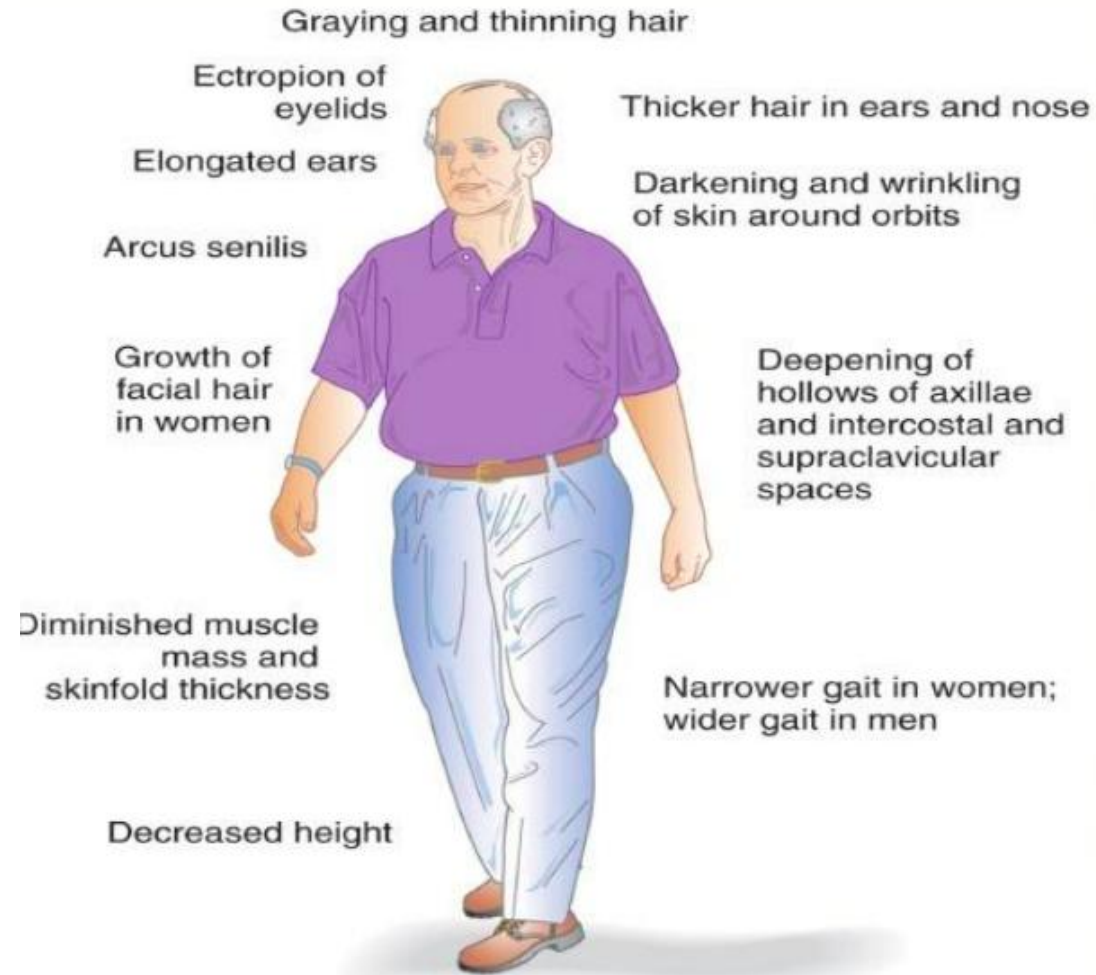






# AGING

- Aging can be described as a progressive and generalized impairment of function that leads to the loss of positive response to stress and increased risk of age-related diseases.
- There are various aspects of aging;
- Chronological aging
- Biological aging
- Psychological aging
- Social aging



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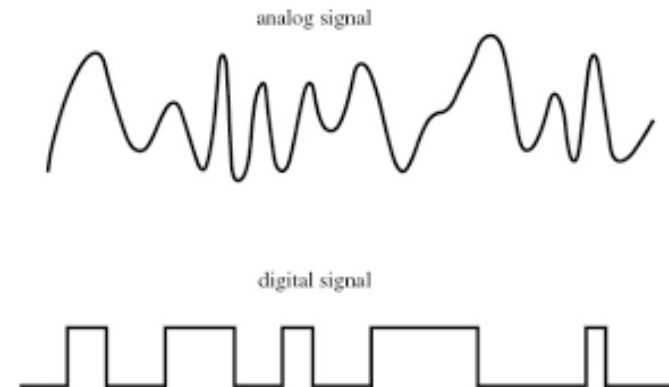
# TWO TYPES OF BIOLOGICAL INFORMATION

"Aging, quite simply, is a loss of information."

Two types of biological information:

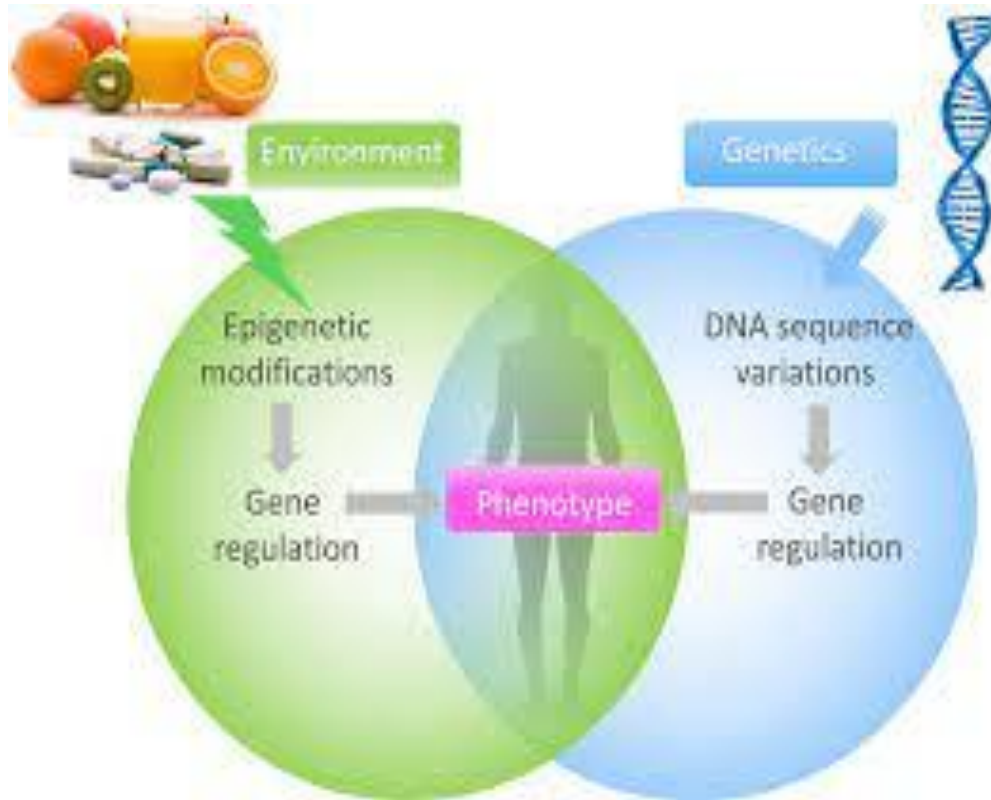
- Digital: genetics stored in **DNA**
- Analog: **epigenetics** stored in chromatin

[Lifespan by David Sinclair — Max Frenzel](#)





# DNA & EPIGENOME



- Each of our cells has the same **DNA**. What differentiates one type of cell from another is the **epigenome**, the control system that determines which genes are turned on or off.
- **DNA is like a piano, and the epigenome is the pianist who plays it.** The epigenome has a greater influence in controlling our lives.
- **Aging is really noise in the epigenome.** It's not the piano that breaks, it's the player that adds in more and more random notes until the music becomes just noise.



# DISEASE OR AGING?



- Cancer, heart disease and Alzheimer's could all be symptoms of one disease aging!!!
- Our medical services have a WACK A MOLE system. They hit each one down as they appear.

# EFFECTS OF DEMOGRAPHIC CHANGES ON OUR COMMUNITY

- **Increased number of elders** in the family.
- **Increased level of chronic diseases** which require special care.
- Increased number of widows.
- **Poorer health services.**
- Very expensive retirement / care homes.
- **Family less likely to act as carers for their parents.**



Hypertension  
(Blood Pressure)  
51%



High Cholesterol  
51%



Arthritis  
35%



Ischemic /  
Coronary  
Heart Disease  
29%



Diabetes  
27%

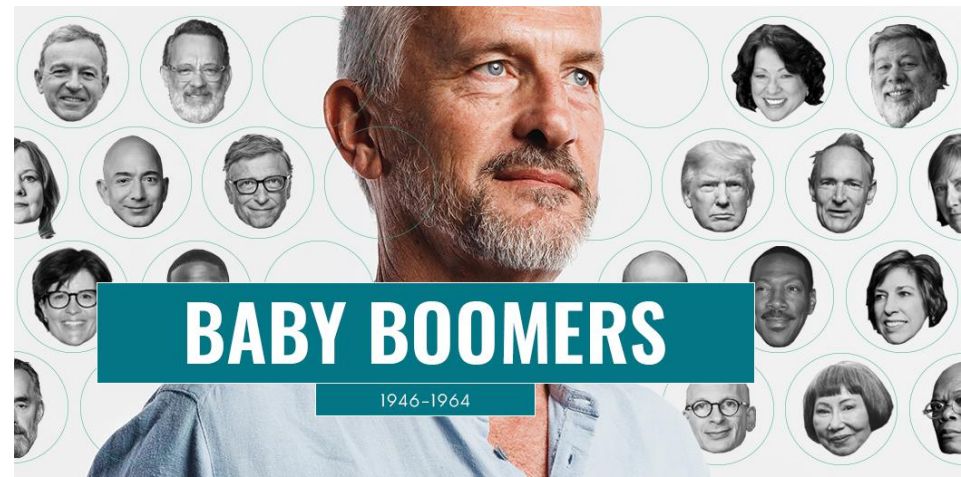


# WHATS GOOD ABOUT THE BABY BOOMERS?

Medicine has prolonged life, but the last years are defined by degenerative diseases.

This is something we are seeing in the baby boomers, which are probably the **healthiest and most successful era in history.**

These people grew up with **manual labour and rationing.** Which should have made them very healthy.



# WHATS THE PROBLEM? 1970 – 2020.

For people born between **1970 and 2020 we have a real problem**, because we don't have the same lifestyles as the baby boomers, **it is much worse!!!!**

What will be the **difference between our life and health span?**

Will we have a health service to look after us?

